

BOTTLENOSE DOLPHIN DEATHS FROM RECREATIONAL GEAR

Why is there an increase in bottlenose dolphin deaths from recreational gear?

We are not exactly sure why there has been an increase in deaths from recreational fishing gear, but we believe an increase in dolphins depredating (stealing) anglers' bait and catch may be a contributing factor. Dolphins are ingesting the hooks and line or getting entangled in the monofilament resulting in injuries and, in many recent cases, death.

Which areas around Florida have seen an increase in bottlenose dolphin injuries and deaths from recreational gear? Around the southeast region?

Within the last year, Indian River Lagoon and Southwest Florida (Sarasota Bay, Charlotte Harbor, and Tampa Bay) are currently the only areas that we are aware of in Florida with a measurable increase in strandings associated with recreational gear, and resulting deaths, of bottlenose dolphins. Florida has a very large number of recreational anglers year-round, who fish in coastal waters that are also inhabited by bottlenose dolphins.

We are currently not aware of a marked increase in deaths associated with recreational gear in other states of the southeast region.

How many dolphins stranded dead in Florida last year (2005) with recreational gear attached compared with 2006?

2005

Last year, four dolphins stranded dead with recreational fishing gear attached. Two ingested hooks and line; one was entangled; and one had a hook and line in the mouth.

2006

To date, NOAA Fisheries Service received reports of 13 bottlenose dolphins stranded with recreational fishing gear attached. Nine ingested gear; three were entangled; and one had a hook and line in the mouth.

Mote Marine Laboratory (Mote) (www.mote.org) recovered five of the 13, and Hubbs-Sea World (HSWRI) (www.hswri.org) recovered six. Mote scientists recovered all five in Sarasota Bay and surrounding waters to the south. Four died as a direct result of the fishing gear – three adults from ingestion of lures, hooks and line, and one calf from entanglement that nearly cut off its tail. The four adult dolphins were long-term residents of Sarasota Bay. In comparison, for all of 2005, Mote reported only one animal stranded in the Sarasota Bay area with recreational gear attached, and it was determined the gear did not contribute to the animal's death.

Of the six dolphins recovered dead by HSWRI from the Indian River Lagoon, four showed signs that the gear clearly contributed to the dolphins' mortalities. Last year, HSWRI recovered only two animals with recreational gear attached.

Two of the 13 dolphins stranded in the Tampa Bay/Clearwater area with recreational gear attached – the Florida Aquarium recovered one dolphin stranded in Tampa Bay; Clearwater Marine Aquarium recovered another dolphin stranded on Clearwater Beach. Although the cause of death is unknown for these two dolphins, both dolphins were found stranded with hooks and monofilament line in their stomach.

The number of wild dolphins killed or injured as a result of entanglement or hooking with recreational fishing gear this year is already markedly greater in some areas than in years past. For example, thus far in 2006, approximately 25% of the stranded dolphins recovered in Sarasota Bay were determined to have died due to fishing gear, compared to an annual average of 2.9% for 2000-2005. Such losses are unprecedented in the 36-year history of dolphin research in Sarasota Bay.

What are the conservation implications of the significant increases in bottlenose dolphin deaths, especially in Sarasota Bay? Why are biologists concerned?

The dolphins inhabiting Sarasota Bay represent a long-term resident community of bottlenose dolphins spanning five generations that remain year-round within a discrete geographic area (Scott et al. 1990; Wells 1991; Wells 2003). Therefore, most of these animals typically do not move to other geographic locations and mix with other communities or population stocks of dolphins. When dolphin deaths from human activities in a small community like Sarasota Bay are added to the normal mortalities for this community, the rate of loss may not be sustainable. The potential impact of these mortalities causes more concern when considered with the possibility of an upward trend in mortalities from recreational gear, especially during the summer months when recreational boating and fishing activities are elevated.

Please see the section on “[Bottlenose Dolphin Abundance and Conservation](#)” for more information on stock structure and general conservation concerns.

Biologists are also concerned that activities, such as illegally feeding wild dolphins, will continue to promote behaviors, such as habituation to people and depredation from gear, and escalate the potential for interactions resulting in injuries or deaths. For more questions regarding depredation or feeding, please see the following sections: “[Dolphins Depredating \(Stealing\) Bait/Catch](#)” and “[Feeding Wild Dolphins](#).”